

REMARKS

Applicant's counsel thanks the Examiner for the careful consideration given the application.

Claims

Claims 1, 5 and 13 have been amended for clarification.

Amended claims 1 and 13 recite: at each of a plurality of data collection node computers being proximal to a network, polling one or more network devices in the network, including: querying one or more network devices for which the data collection node computer is responsible, and creating a distributed network topology database based on the record of the querying.

Claim 2 has been amended to recite that the polling step includes the step of implementing parallel processing of the distributed network topology database. Claim 3 has been amended to recite that the polling step includes the step of launching a vendor specific discovery subroutine upon detection of a non-MIB II standard device so as to query a vendor's private MIB. Claim 4 has been amended to replace "server computers" with --server computer--. Claims 14-16 have been amended to correspond to amended claims 2-4, respectively.

Amended claim 5 recites a plurality of data collection node computers for discovering network devices in a network, the data collection node computers being proximal to the network, each including: at least one discovery engine instance for polling one or more network devices for which the data collection node computer is responsible, a distributed network topology database created based on record of the polling.

Claim 6 has been amended to replace "computers" with --computer--. Claim 7 has been amended to recite that the discovery engine instance launches a vendor specific discovery subroutine upon detection of a non-MIB II standard device so as to query a vendor's private MIB. Claim 8 has been amended to replace "server computers" with --server computer--.

The amendment to the claims is fully supported by the application as originally filed. In particular, support for the amendment to claims 1, 5 and 13 can be found, for example, on page 4, lines 1-15 and Figure 1. No new matter has been introduced by way of the amendment.

Specification

The description of page 5 has been amended to add a new paragraph. Support for the amendment can be found, for example, on original claim 8. No new matter has been introduced by way of the amendment.

Claim Rejection

The Examiner rejected claims 1, 2, 5, 6, 13 and 14 under 35 U.S.C. 102(e) as being anticipated by Sharon et al. (US Patent No. 6,205,122), hereinafter referred to as Sharon.

The Examiner rejected claims 3, 7 and 15 under 35 U.S.C. 103(a) as being unpatentable over Sharon in view of Crooks. (US Patent Application Publication No. 2002/0055988).

The Examiner rejected claims 4, 8 and 16 under 35 U.S.C. 103(a) as being unpatentable over Sharon in view of Sharon et al. (US Patent No. 6,137,782), hereinafter referred to as Sharon-2.

Claims 1, 5 and 13 have been amended to clarify the invention. According to the present invention, each of data collection node computers is located proximal to a network, and is provided for polling one or more network devices for which the data collection node computer is responsible (claims 1, 5 and 13). A polling query is sent to the associated network device (claims 1 and 13). At each data collection node computer, a distributed network topology database is created based on the record of the polling (querying). The database is imported to at least one performance monitor server computer for network management.

By contrast, Sharon discloses a system having a plurality of agents 14, each of which watches and intercepts raw traffic on a network. The agent 14 includes a network monitor 36 which detects any information received through the network card, and instructs the network card to operate in promiscuous mode. In promiscuous mode, the network card receives all packets traveling through the

network segment, even if these packets are not specifically addressed to that particular network card itself (col. 9, lines 24-32). The agent 14 does not send any polling queries. The system of Sharon further includes a CME 12 (Figure 1). The CME 12 sends a test packet. However, this packet is sent to the agent 14, and not to a network device (col. 8, lines 44-55, col. 9, lines 43-45). Sharon neither suggests nor teaches polling (querying) one or more network devices as recited in claims 1, 5 and 13.

Crooks describes a system for mapping the Layer 2 topology of a Frame Relay network from Layer 3 information. Crooks uses network management system (NMS), standard MIB and vendor private MIBs as sources for the configuration information for the components of local LAN. Crooks requires this information in order to proceed with the algorithm for correlating the Layer 2 to Layer 3 in order to derive the Frame Relay topology. Crooks does not poll network devices, and does not create network topology database which is utilized for network management. Crooks is not relevant to the present invention.

There is no explicit or implicit suggestion or motivation in the cited references to combine, substitute or otherwise modify the cited references in a way that would produce the claimed invention. Even if combining Sharon and Crooks, the combination cannot produce the claims invention since none of the cited references taken alone or in combination thereof suggests or teaches the subject matter of claims 1, 5 and 13.

With respect to the rejections of claims 4, 8 and 16, the Examiner stated that Sharon's agents are equivalent to the client computers, but Sharon does not disclose that the client computer is a performance monitor client computer.

Claims 4, 8 and 16 depend on claims 1, 5 and 13, respectively. Thus, according to claims 4, 8, and 16, (1) data collection node computers, (2) at least one performance monitor server computer and (3) at least one performance monitor client computer are provided for monitor the network.

Sharon's agent 14 is provided for intercepting raw traffic to collect topology information, and is not a client computer. Sharon does not disclose any server and client computers.

Sharon-2 is based on Sharon's system, and uses the agents 14 and the CME 12. Sharon-2 does not add any teaching to Sharon to render claims 1, 5 and 13 unpatentable.

Hence it is respectfully submitted that claims 1-8 and 13-16 are patentable in view of the cited reference. Applicant respectfully requests the Examiner reconsider the rejections.

In view of the above amendments and remarks and having dealt with all the objections raised by the Examiner, reconsideration and allowance of the application is courteously requested.

If there are any further fees required by this communication, please charge such fees to our Deposit Account No. 16-0820, Order No. 33556.

Respectfully Submitted,

PEARNE & GORDON LLP

By John P. Murtaugh
John P. Murtaugh, Reg. No. 34226

1801 East 9th Street
Suite 1200
Cleveland, Ohio 44114-3108
(216) 579-1700

Date: 6-23-05